5. (Amended) The electric axial flow machine as claimed in claim 1, wherein the fiber- or fabric-reinforced plastic comprises an epoxy resin or an imide resin with glass fiber reinforcement.

6. (Amended) The electric axial flow machine as claimed in claim 1, wherein the permanent magnets respectively comprise at least two separate magnet segments next to one another, in a circumferential direction, joined by a metal adhesive.

7. (Amended) The electric axial flow machine as claimed in claim 1, wherein the stator comprises an annular yoke including slots extending approximately radially and through which multi-phase windings pass.

8. (Amended) The electric axial flow machine as claimed in claim 7, wherein one of the permanent magnets and the slots are transposed in a circumferential direction.

9. (Amended) The electric axial flow machine as claimed in claim 1, including two stators electrically offset in relation to one another in a circumferential direction by 180° so that magnetic fluxes in the circumferential direction in the rotor are oppositely oriented and essentially cancel one another.

10. (Amended) A method for producing a rotor for an electric axial flow machine as claimed in claim 1, wherein the machine shaft and the permanent magnets are arranged in a mold and a pre-heated fiber- or fabric-reinforced plastic is subsequently poured under pressure into the mold, which is heated.

11. (Amended) The method as claimed in claim 10, including pouring the fiber- or fabric-reinforced plastic at a temperature of at least 200°C and under a pressure of 500 - 1500 bar.

IN THE ABSTRACT:

Insert the following abstract:

Abstract Of The Disclosure

An electric axial flow machine includes an ironless disk-shaped rotor arranged on a machine shaft and having permanent magnets embedded in a fiber- or fabric-reinforced plastic, and, on both sides, next to the rotor, a stator, wherein the permanent magnets are each